

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A fuel pump for supplying fuel drawn from a fuel tank into an internal combustion engine, the fuel tank comprising:

a rotor;

a rotation shaft, which revolves integrally with the rotor; bearing members, which support both axial ends of the rotation shaft;

a stator, which is disposed on an outer circumference of the rotor and surrounds the rotor;

a drawing force generative means, which generates drawing force for drawing fuel from the fuel tank by means of rotation force of the rotor, wherein:

the rotor has a recess in a center of its axial end portion; ~~and~~

at least one of the bearing members is disposed in the recess;

the stator has a permanent magnet, which is disposed on its circumference and forms a plurality of magnetic poles the polar characters of which are alternated;

the rotor includes an armature, which is rotatably disposed inside of the stator, and a commutator, which rotates integrally with the armature and has a plurality of segments respectively electrically connected with coils of the armature; and

the armature has a cover, which covers one of the axial end portions of the armature, and said recess in the rotor includes a recess formed in said cover.

2. (Original) A fuel pump according to claim 1, wherein:

the drawing force generative means has a rotation member, which rotates integrally with the rotor, and a case member, which houses the rotation member;

the case member has a projecting portion, which is disposed in the recess, and at least one part of the projecting portion projects toward the recess; and

the projecting portion supports one of the bearing members by an inner periphery of the projecting portion.

3. (Currently amended) A fuel pump for supplying fuel drawn from a fuel tank into an internal combustion engine, the fuel tank comprising:

- a rotor;
- a rotation shaft, which revolves integrally with the rotor;
- shaft bearing members, which support both axial ends of the rotation shaft;
- a stator, which is disposed on an outer circumference of the rotor and surrounds the rotor; and

a drawing force generative means, which generates drawing force for drawing fuel from the fuel tank by means of rotation force of the rotor, wherein the rotor and the drawing force generative means are disposed to be overlapped in an axial direction of the rotor, wherein:

the rotor and the drawing force generative means respectively have stepped portions;

the rotor and the drawing force generative means are disposed to be overlapped so that the stepped portions oppose each other;

the stator has a permanent magnet, which is disposed on its circumference and forms a plurality of magnetic poles the polar characters of which are alternated;

the rotor includes an armature, which is rotatably disposed inside of the stator, and a commutator, which rotates integrally with the armature and has a plurality of segments respectively electrically connected with coils of the armature; and

the armature has a cover, which covers one of the axial end portions of the armature, and said stepped portion of the rotor includes a stepped portion formed in said cover.

4. (Currently amended) A fuel pump according to ~~claim 3~~ claim 2, wherein at least one part of the projecting portion is disposed in the recess, and thereby the rotor

and the drawing force generative means are disposed to be overlapped in an axial direction of the rotor.

5. (Original) A fuel pump according to claim 4, wherein the rotor has a recess in a center of its axial end portion.

6. (Original) A fuel pump according to claim 5, wherein the drawing force generative means has a rotation member, which rotates integrally with the rotor, and a case member, which houses the rotation member.

Claims 7-12. (Canceled).

13. (Original) A fuel pump according to claim 1, wherein: the cover has a connective portion, which is disposed at a bottom of the recess and connected with the rotation shaft, and a cylindrical portion, which extends from an outer periphery of the connective portion to an opening of the recess along the rotation shaft; and thickness of the connective portion is thicker than thickness of the cylindrical portion.

14. (Original) A fuel pump according to claim 1, wherein: the armature includes a plurality of bobbins arranged in the circumferential direction of the armature; and each bobbin is wound with a coil by way of concentrated winding.

15. (Original) A fuel pump according to claim 14, wherein the armature includes: a central core, which is disposed in the rotational center of the armature; and a plurality of coil cores magnetically connected with the central core, the coil cores being different bodies from the central core and disposed in the outer circumference of the central core to be arranged in the circumferential direction thereof.

16. (Currently amended) A fuel pump according to ~~claim 1~~ claim 14, wherein a room around each bobbin to be wound with a coil is formed to be a trapezoidal shape that becomes smaller from the outer periphery to the rotational center of the coil core.

17. (Original) A fuel pump according to claim 1, wherein the position of the centroid of the rotor is positioned in the substantial center between the bearing members.

18. (Original) A fuel pump according to claim 3, wherein the position of the centroid of the rotor is positioned in the substantial center between the bearing members.

19. (New) An apparatus for supplying fuel drawn from a fuel tank, the apparatus comprising:

- a rotor including armature coils;

- a rotation shaft, which revolves integrally with the rotor;

- bearing members, which support both axial ends of the rotation shaft;

- a stator disposed around an outer circumference of the rotor;

- a drawing force generative means, which is disposed adjacent to the rotor in an axial direction of the rotation shaft and generates drawing force for drawing fuel from the fuel tank by means of rotation force of the rotor and supplying the fuel into a space between the rotor and the stator in the axial direction, wherein:

 - the rotor has a recess in a center of one axial end portion thereof, which faces the drawing force generative means;

 - at least one of the bearing members is disposed in the recess to overlap with the rotor in the axial direction; and

 - a cover provided over a surface of the one axial end portion of the rotor thereby to smooth flow of the fuel supplied through the drawing force generative means.

20. (New) An apparatus according to claim 19, wherein the cover has a tapering part disposed circumferentially around the rotation shaft, a diameter of the tapering part being gradually increased from the center of said one axial end portion of the rotor toward the drawing force generative means.

21. (New) An apparatus according to claim 19, wherein said cover is disposed between said at least one bearing member and said recess in the rotor.

22. (New) A fuel pump according to claim 1, wherein said cover is disposed between said at least one bearing member and said recess in the rotor.

23. (New) A fuel pump according to claim 1, wherein said recess in said cover defines a receptacle opening away from the armature that at least partially receives said at least one bearing member.